50 NCLEX CRITICAL THINKING QUESTIONS

Neurological & Medical-Surgical Nursing

Questions 1-10: Priority & Emergency Management

Question 1

A nurse receives report on four patients. Which patient should be assessed FIRST?

- A) Post-stroke patient with BP 145/85 on tPA infusion started 30 minutes ago
- B) Patient with cirrhosis who has asterixis and ammonia level of 85
- C) Patient with ICP monitor reading 18 mmHg who is drowsy but arousable
- D) Patient 2 hours post-seizure complaining of headache rated 6/10

Answer: A
Rationale: Patient on tPA requires q15min neuro checks and VS monitoring. The BP is above target (<185/110) which increases hemorrhage risk. This requires immediate intervention.

Question 2

A patient's ICP reading is 22 mmHg with MAP of 85. What is the nurse's PRIORITY action?

- A) Calculate the CPP and document
- B) Elevate HOB to 45 degrees
- C) Administer mannitol as ordered
- D) Notify the physician immediately

Answer: C
Rationale: ICP >20 requires immediate intervention. Mannitol is the fastest pharmacologic intervention. CPP = 85-22 = 63 (still adequate). HOB should be 30°, not 45°.

Question 3

A patient arrives to ED at 1400 with stroke symptoms that began at 1130. CT shows no hemorrhage. BP is 195/105. What is the PRIORITY intervention?

- A) Prepare for tPA administration after BP control
- B) Start antiplatelet therapy immediately
- C) Transfer to ICU for BP management
- D) Obtain MRI for further evaluation

Answer: A
Rationale: Patient is within 3-hour window for tPA (optimal). BP needs to be <185/110 first. This is the priority - control BP then give tPA.

Question 4

During morning assessment, a cirrhotic patient cannot state the current date and has a flapping tremor. Ammonia level is 110. What should the nurse do FIRST?

- A) Administer lactulose 30mL PO
- B) Implement fall precautions
- C) Check for GI bleeding
- D) Restrict protein intake

Answer: A
Rationale: Patient has hepatic encephalopathy (confusion + asterixis + high ammonia). Lactulose is the primary treatment to reduce ammonia levels.

Question 5

A patient suddenly develops Cushing's Triad. What action indicates the nurse understands this is a medical emergency?

- A) Places patient flat and calls rapid response
- B) Prepares for immediate intubation
- C) Administers atropine for bradycardia
- D) Starts cooling measures for fever

Answer: B
Rationale: Cushing's Triad = brainstem compression = death imminent. Airway protection via intubation is critical as respiratory arrest is imminent.

Question 6

A seizure patient's phenytoin level is 8. The patient reports bleeding gums. What is the nurse's BEST response?

- A) "This is expected; use a soft toothbrush"
- B) "Your level is subtherapeutic; expect dose increase"
- C) "Stop the medication and call your provider"
- D) "This indicates toxicity; we'll decrease your dose"

Answer: B
Rationale: Therapeutic level is 10-20; patient is subtherapeutic. Gingival hyperplasia is a known side effect regardless of level, not a sign of toxicity.

Question 7

Four hours after paracentesis removing 4L of fluid, a patient becomes hypotensive. What is the PRIORITY intervention?

- A) Administer albumin IV
- B) Place in Trendelenburg position
- C) Increase IV fluid rate
- D) Check for signs of bleeding

Answer: A
Rationale: Large volume paracentesis causes fluid shifts and hypotension. Albumin replacement is the specific treatment to restore oncotic pressure.

Question 8

A patient on the neuro unit has an EVD (external ventricular drain) set at 10cm above the tragus. ICP reads 25. What should the nurse do?

- A) Lower the drain to increase drainage
- B) Raise the drain to decrease drainage
- C) Keep drain level and notify MD
- D) Clamp the drain immediately

Answer: C
Rationale: Never independently adjust EVD level without orders. ICP of 25 is critical but requires MD notification for orders, not independent nursing action.

Question 9

A post-tPA stroke patient develops a severe headache and vomits. What is the nurse's IMMEDIATE action?

- A) Stop the infusion and notify MD
- B) Administer antiemetic as ordered
- C) Check blood glucose level
- D) Obtain STAT head CT

Answer: A
Rationale: New headache and vomiting post-tPA suggests intracranial hemorrhage. STOP infusion immediately, then notify MD for further orders including CT.

Question 10

A patient with thyroid storm has temp 105°F, HR 145, BP 160/85. What is the PRIORITY intervention?

- A) Administer acetaminophen for fever
- B) Apply cooling blanket
- C) Give propranolol as ordered
- D) Start PTU infusion

Answer: C
Rationale: Beta-blockers are priority to control cardiovascular symptoms and prevent cardiac complications. Cooling and PTU are important but cardiac protection is immediate priority.

Questions 11-20: Assessment & Recognition

Question 11

Which assessment finding indicates a patient with cirrhosis is developing hepatorenal syndrome?

- A) Urine output 20mL/hr despite adequate fluid intake
- B) Creatinine increased from 1.0 to 1.2
- C) Dark amber urine with specific gravity 1.030
- D) BUN elevated with normal creatinine

Answer: A
Rationale: Oliguria (<30mL/hr) despite adequate volume is classic for hepatorenal syndrome. The kidneys are structurally normal but failing due to cirrhosis complications.

Question 12

A nurse assessing a patient 24 hours post-craniotomy notes clear drainage on the dressing. What test would CONFIRM CSF leak?

- A) Check drainage pH
- B) Test for glucose presence
- C) Send for culture
- D) Test for protein

Answer: B
Rationale: CSF contains glucose; nasal drainage doesn't. Positive glucose (test with glucose strips) confirms CSF leak. "Halo test" on gauze also works.

Question 13

Which patient statement indicates they understand phenytoin teaching?

- A) "I'll take it with my morning antacid"
- B) "I'll hold my tube feeding for an hour after taking it"
- C) "I can stop it once my seizures are controlled"
- D) "I'll double my birth control pill dose"

Answer: B
Rationale: Tube feedings decrease phenytoin absorption - must hold for 1 hour. Antacids also decrease absorption. Never stop suddenly. Birth control effectiveness is decreased but doubling dose is not the solution.

Question 14

A patient's Glasgow Coma Scale changes from 14 to 10. Which component change is MOST concerning?

- A) Eye opening decreased from 4 to 3
- B) Verbal response decreased from 5 to 3
- C) Motor response decreased from 5 to 4
- D) All changes are equally concerning

Answer: B
Rationale: Verbal dropping from 5 (oriented) to 3 (inappropriate words) indicates significant deterioration in cognitive function. This dramatic change requires immediate action.

Question 15

A patient with pancreatitis has severe pain, BP 88/50, HR 125. Lab shows calcium 6.8. What does this indicate?

- A) Hemorrhagic pancreatitis with poor prognosis
- B) Chronic pancreatitis exacerbation
- C) Pancreatic pseudocyst formation
- D) Development of diabetes mellitus

Answer: A
Rationale: Hypocalcemia <7 with shock symptoms indicates severe necrotizing pancreatitis with poor prognosis. Calcium gets consumed in fat necrosis process.

Question 16

Which finding would the nurse expect in a patient with EARLY hepatic encephalopathy?

- A) Asterixis
- B) Fetor hepaticus
- C) Reversal of sleep pattern
- D) Seizures

Answer: C
Rationale: Sleep pattern reversal (awake at night, sleepy during day) is often the FIRST sign of hepatic encephalopathy, before asterixis or other obvious signs.

Question 17

A patient post-thyroidectomy complains of tingling around the mouth and muscle cramps. What should the nurse assess FIRST?

- A) Chvostek's sign
- B) Thyroid hormone level
- C) Temperature
- D) Surgical site

Answer: A
Rationale: Symptoms suggest hypocalcemia from parathyroid damage during surgery. Chvostek's sign (facial twitching when tapping facial nerve) confirms hypocalcemia.

Question 18

During tPA infusion, which finding requires the nurse to STOP the infusion?

- A) BP 170/95
- B) Mild oozing from IV site
- C) Patient confusion
- D) Decreased urine output

Answer: C
Rationale: New confusion during tPA could indicate intracranial hemorrhage. Stop infusion immediately and assess further. BP <185/110 is required.

Question 19

A patient with ICP monitoring has a waveform showing P2 > P1. What does this indicate?

- A) Normal compliance
- B) Decreased compliance
- C) Equipment malfunction
- D) Need for calibration

Answer: B
Rationale: Normal ICP waveform has P1 (percussion) > P2 (tidal). When P2 > P1, it indicates decreased brain compliance and increased ICP risk.

Question 20

Which assessment finding in a seizure patient on valproic acid requires immediate intervention?

- A) Weight gain of 5 pounds
- B) Mild hand tremor
- C) Ammonia level 100
- D) Platelet count 140,000

Answer: C
Rationale: Valproic acid can cause hyperammonemic encephalopathy. Elevated ammonia with this drug requires immediate intervention to prevent serious neurologic complications.

Questions 21-30: Clinical Decision Making

Question 21

A nurse must position four patients. Which positioning is INCORRECT?

- A) ICP patient - HOB 30°, midline head position
- B) Post-LP patient - flat for 4 hours
- C) Seizure patient - side-lying during seizure
- D) Hemorrhagic stroke - HOB 45° to decrease ICP

Answer: D
Rationale: Hemorrhagic stroke patients should have HOB at 30°, not 45°. Higher elevation can decrease cerebral perfusion. 30° optimizes ICP reduction while maintaining perfusion.

Question 22

A patient with cirrhosis has the following labs. Which requires IMMEDIATE intervention?

- A) Albumin 2.8
- B) Bilirubin 3.5
- C) Platelets 45,000
- D) Sodium 128

Answer: C
Rationale: Platelets <50,000 indicate severe thrombocytopenia with high bleeding risk, especially concerning with existing esophageal varices. Requires immediate intervention.

Question 23

A patient receiving mannitol for increased ICP has urine output of 300mL/hr. Serum osmolality is 325. What is the nurse's BEST action?

- A) Continue current dose
- B) Increase infusion rate
- C) Hold dose and notify MD
- D) Check serum sodium

Answer: C
Rationale: Serum osmolality >320 indicates need to stop mannitol to prevent renal failure. Excessive diuresis confirms this. Hold and notify for further orders.

Question 24

A patient is day 2 post-acute pancreatitis. Which dietary order would the nurse question?

- A) Clear liquids
- B) NPO status
- C) Low-fat diet
- D) TPN via central line

Answer: C
Rationale: Day 2 is too early for solid food. Patient should remain NPO until amylase normalizes and pain resolves. Low-fat diet is appropriate later in recovery.

Question 25

A hypothyroid patient on levothyroxine reports palpitations and anxiety. TSH is 0.1. What should the nurse anticipate?

- A) Dose increase
- B) Dose decrease
- C) Medication change
- D) Addition of beta-blocker

Answer: B
Rationale: Low TSH with hyperthyroid symptoms indicates overreplacement. Dose should be decreased. TSH <0.5 suggests too much thyroid hormone.

Question 26

A patient with status epilepticus received lorazepam 4mg IV. Seizure continues after 5 minutes. What is the NEXT appropriate action?

- A) Repeat lorazepam 4mg
- B) Give phenytoin loading dose
- C) Administer propofol
- D) Intubate immediately

Answer: B
Rationale: After benzodiazepine failure, move to antiepileptic drugs (phenytoin or fosphenytoin). Don't repeat benzos due to respiratory depression risk.

Question 27

Which intervention would be CONTRAINDICATED for a patient with suspected basilar skull fracture?

- A) HOB elevation 30°
- B) Nasogastric tube insertion
- C) Seizure precautions
- D) Neurological assessments q1h

Answer: B
Rationale: NG tube is contraindicated with basilar skull fracture due to risk of intracranial insertion through fractured cribriform plate. Use orogastric instead.

Question 28

A cirrhotic patient's lactulose is causing 6-7 loose stools daily. Ammonia decreased from 100 to 60. What should the nurse do?

- A) Hold the lactulose
- B) Decrease frequency to BID
- C) Continue current dose
- D) Add Imodium

Answer: C
Rationale: 2-3 soft stools daily is goal, but with ammonia still elevated (normal <45) and improvement shown, continue treatment. Multiple stools indicate it's working.

Question 29

A stroke patient failed swallow evaluation. Which diet order is MOST appropriate?

- A) Pureed with honey-thick liquids
- B) Regular diet with thin liquids
- C) NPO with NG tube feeding
- D) Soft diet with nectar-thick liquids

Answer: C
Rationale: Failed swallow evaluation means high aspiration risk. NPO with alternative nutrition (NG/PEG) is safest until swallowing improves with therapy.

Question 30

A patient with Graves' disease has exophthalmos. Which intervention is MOST important?

- A) Artificial tears every 2 hours
- B) Sleep with head elevated
- C) Wear sunglasses outdoors
- D) Tape eyelids shut at night

Answer: A

Rationale: Exophthalmos causes incomplete lid closure leading to corneal drying and ulceration. Frequent artificial tears are essential to prevent vision loss.

Questions 31-40: Complex Scenarios

Question 31

An intubated patient with ICP 28 has the following ABG: pH 7.48, PaCO2 28, HCO3 22, PaO2 98. What should the nurse recognize?

- A) Appropriate therapeutic hyperventilation
- B) Respiratory alkalosis requiring intervention
- C) Metabolic alkalosis from diuretics
- D) Mixed acid-base disorder

Answer: A

Rationale: Mild hyperventilation to PaCO2 30-35 (here 28) causes vasoconstriction, reducing ICP. This is therapeutic, though slightly below target range.

Question 32

A patient presents with thyroid storm. Which medication combination would the nurse expect?

- A) Methimazole, propranolol, iodine, hydrocortisone
- B) Levothyroxine, atenolol, prednisone
- C) PTU, metoprolol, aspirin, dexamethasone
- D) Methimazole, diltiazem, acetaminophen

Answer: A

Rationale: Thyroid storm requires: antithyroid drug (methimazole/PTU), beta-blocker (propranolol), iodine (given 1 hour after antithyroid drug), and steroids (hydrocortisone).

Question 33

A nurse finds a patient having a seizure. After 3 minutes, the seizure continues. Place interventions in priority order:

1. Maintain airway
2. Time the seizure
3. Administer lorazepam
4. Check blood glucose
5. Start IV access

Answer: 1, 2, 5, 3, 4
Rationale: Airway always first, time to determine if status epilepticus, need IV access for medications, give benzo at 5 minutes, check glucose after immediate interventions.

Question 34

A cirrhotic patient with varices has coffee-ground emesis and BP 82/48. What is the PRIORITY intervention sequence?

- A) Large-bore IV access → Fluids/blood → Octreotide → Endoscopy
- B) Endoscopy → Octreotide → IV access → Transfusion
- C) NG lavage → IV access → Vasopressin → Surgery
- D) Blood type/cross → Vitamin K → FFP → Fluid resuscitation

Answer: A
Rationale: Stabilize first (IV access, fluids/blood), then octreotide to reduce portal pressure, then diagnostic/therapeutic endoscopy once stable.

Question 35

A patient 6 hours post-tPA has hematuria and oozing from IV sites. PT/INR is 3.5. What should the nurse prepare to administer?

- A) Vitamin K 10mg IV
- B) Protamine sulfate
- C) Fresh frozen plasma
- D) Cryoprecipitate and FFP

Answer: D
Rationale: Post-tPA bleeding requires cryoprecipitate (replaces fibrinogen) and FFP (replaces clotting factors). This is the specific reversal protocol for tPA.

Question 36

A patient with chronic pancreatitis has steatorrhea despite pancreatic enzyme replacement. What should the nurse assess?

- A) Timing of enzyme administration
- B) Need for dose increase
- C) Diet compliance
- D) All of the above

Answer: D
Rationale: Multiple factors affect enzyme therapy success: must be taken with meals, adequate dosing, and low-fat diet compliance. All must be assessed.

Question 37

A patient with myxedema coma has temp 94°F, HR 45, BP 80/50. What is the INCORRECT intervention?

- A) Warm blankets and warming lights
- B) IV levothyroxine bolus
- C) Hydrocortisone IV
- D) Aggressive fluid resuscitation

Answer: D
Rationale: Myxedema coma causes cardiac dysfunction. Aggressive fluids can precipitate heart failure. Gentle rewarming, thyroid hormone, and steroids are appropriate.

Question 38

During shift assessment, the nurse notes a patient with cirrhosis has become difficult to arouse and has asterixis. Yesterday's ammonia was 45. What is the MOST appropriate action?

- A) Increase lactulose frequency
- B) Check ammonia level stat
- C) Restrict protein immediately
- D) Prepare for dialysis

Answer: A
Rationale: Worsening encephalopathy despite previously controlled ammonia suggests need for increased lactulose. Can increase frequency before waiting for new lab results.

Question 39

A patient with left hemispheric stroke has global aphasia and right hemiplegia. The family asks about prognosis. What is the nurse's BEST response?

- A) "Most patients recover speech within 6 months"
- B) "Recovery varies; therapy will maximize function"
- C) "The damage appears extensive; expect minimal recovery"
- D) "We need more tests to determine prognosis"

Answer: B
Rationale: Honest but hopeful response acknowledging uncertainty while emphasizing rehabilitation potential. Avoid false hope or unnecessary pessimism early in recovery.

Question 40

A patient on phenytoin for seizures is admitted with ataxia, nystagmus, and confusion. Phenytoin level is 28. What should the nurse do FIRST?

- A) Hold phenytoin doses
- B) Administer vitamin K
- C) Check blood glucose
- D) Prepare for dialysis

Answer: A
Rationale: Level >20 is toxic. Symptoms match phenytoin toxicity. Hold medication immediately. Dialysis rarely needed unless level >40 with severe symptoms.

Questions 41-50: Advanced Clinical Judgment

Question 41

A nurse cares for four patients with ICP monitors. Which patient requires MOST immediate intervention?

- A) ICP 18, CPP 65, responding to commands
- B) ICP 15, CPP 55, confused to place
- C) ICP 22, CPP 58, withdraws to pain
- D) ICP 12, CPP 48, following commands

Answer: D
Rationale: Despite lowest ICP, this patient has CPP <50 indicating inadequate brain perfusion. This is more immediately dangerous than higher ICP with adequate CPP.

Question 42

A patient with acute pancreatitis develops dyspnea, crackles, and O2 sat 88% on day 3 of admission. What complication should the nurse suspect?

- A) Pleural effusion
- B) ARDS
- C) Pneumonia
- D) Pulmonary embolism

Answer: B
Rationale: ARDS typically develops 3-7 days after pancreatitis onset due to inflammatory mediators. Timeline and bilateral symptoms fit ARDS pattern.

Question 43

A patient with hypothyroidism is started on levothyroxine 25mcg daily. The patient asks why such a low dose. What is the nurse's BEST explanation?

- A) "This prevents side effects"
- B) "Your body needs time to adjust to avoid stressing your heart"
- C) "Lower doses work better"
- D) "We'll increase it once you tolerate this dose"

Answer: B
Rationale: In hypothyroidism, the heart adapts to slow metabolism. Sudden increase in thyroid hormone can cause cardiac stress, dysrhythmias, or MI, especially in elderly.

Question 44

A patient with hepatic encephalopathy has been on lactulose and rifaximin for 3 days with minimal improvement. What additional intervention might be considered?

- A) Increase dietary protein
- B) Start neomycin
- C) Add branched-chain amino acids
- D) Begin continuous renal replacement therapy

Answer: C
Rationale: Branched-chain amino acids (BCAA) can help with encephalopathy by providing alternative energy source for brain and muscle, reducing ammonia production.

Question 45

A nurse notices a patient with recent stroke has food pocketing in the right cheek after meals. What is the PRIORITY nursing intervention?

- A) Request speech therapy consult
- B) Provide oral care after each meal
- C) Change diet to pureed consistency
- D) Teach family to check for pocketing

Answer: B
Rationale: Immediate priority is removing pocketed food to prevent aspiration. Oral care after meals is essential. Other interventions are important but not immediate priority.

Question 46

A patient with seizure disorder on multiple AEDs presents with Stevens-Johnson syndrome. Which medication is MOST likely responsible?

- A) Levetiracetam
- B) Lamotrigine
- C) Gabapentin
- D) Topiramate

Answer: B
Rationale: Lamotrigine and carbamazepine have highest risk for Stevens-Johnson syndrome among AEDs. Requires immediate discontinuation and treatment.

Question 47

A patient with varices and ascites has HCT that dropped from 32% to 26% over 8 hours with no obvious bleeding. What should the nurse recognize?

- A) Lab error requiring repeat
- B) Hemodilution from ascites
- C) Slow variceal bleeding
- D) Bone marrow suppression

Answer: C
Rationale: Slow variceal bleeding may not show obvious signs initially. Dropping HCT without visible bleeding in patient with varices requires immediate investigation.

Question 48

A patient arrives with "worst headache of life," nuchal rigidity, and photophobia. CT is negative. What should the nurse prepare for NEXT?

- A) MRI brain
- B) Lumbar puncture
- C) Angiography
- D) EEG

Answer: B
Rationale: Symptoms suggest subarachnoid hemorrhage. If CT is negative (can miss 5-10% early SAH), lumbar puncture looking for xanthochromia (yellow CSF from RBC breakdown) is next.

Question 49

A nurse cares for a patient 24 hours post-craniotomy who develops polyuria (300mL/hr), serum sodium 150, and serum osmolality 300. What complication has developed?

- A) SIADH
- B) Diabetes insipidus
- C) Cerebral salt wasting
- D) Hyperosmolar state

Answer: B
Rationale: Diabetes insipidus post-neurosurgery presents with polyuria, hypernatremia, and high serum osmolality due to lack of ADH. Requires DDAVP replacement.

Question 50

A patient with cirrhosis develops confusion, asterixis, and fetor hepaticus. Ammonia is 120. The patient is on lactulose 30mL QID producing 4 stools daily. What should the nurse recommend?

- A) Increase lactulose to 45mL QID
- B) Add rifaximin 550mg BID
- C) Start protein restriction
- D) Consider liver transplant evaluation

Answer: B
Rationale: Patient has adequate stool output on lactulose but still has high ammonia. Adding rifaximin (reduces ammonia-producing gut bacteria) is the next step before increasing lactulose further.

STUDY TIPS

1. **Focus on understanding rationales** - They contain key clinical reasoning concepts
2. **Look for patterns** in priority setting (ABC, Maslow's, Safety)
3. **Remember the nursing process** - Assessment before intervention
4. **Know your normal values** - Especially drug levels and critical lab values
5. **Practice recognizing cues** - What makes one patient more urgent than another?

KEY CONCEPTS TO MASTER:

- ICP management and Cushing's Triad
- tPA administration and monitoring
- Status epilepticus management
- Hepatic encephalopathy stages and treatment
- Thyroid storm vs myxedema coma
- Glasgow Coma Scale scoring
- Drug therapeutic levels
- Emergency priorities

Remember: These questions test the NCLEX Clinical Judgment Model - recognizing cues, analyzing cues, prioritizing hypotheses, generating solutions, taking action, and evaluating outcomes.

Good luck with your NCLEX preparation!